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TITLE: Criterion Based Training to Reduce Surgical Errors

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13. SUPPLEMENTARY NOTES					
14. ABSTRACT Technical skill is at the core of surgery. Surgical training typically lasts for a specified time period or number of procedures. This approach produces surgeons with considerably variable skill levels. Also, training on patients is becoming unacceptable for patient safety. In contrast, pilots and other non-medical personnel are trained to criteria on simulators to ensure skill proficiency in their MOS prior to reporting for duty. Proficiency levels are objectively established by experienced practitioners, and the trainee is required to consistently demonstrate that level of proficiency before progressing. We propose to use a surgical simulator (the ES3) to train surgical residents to criterion performance levels, and to investigate whether criterion-based training is superior to training for a fixed number of trials. Twenty-four otolaryngology residents will serve as subjects. Eight attending otolaryngologists will establish performance criteria and will serve as comparators for intra-operative assessment. Subjects will complete a battery of validated objective tests to assess visuospatial, perceptual and psychomotor abilities. An experimental group will be trained to criterion on the simulator, and then perform a procedure on a patient. A control group will train by repeatedly performing the same procedure on patients, with no simulator training. All procedures will be videotaped and objectively assessed for explicitly defined metrics. We hypothesize that prior training to established criteria will reduce surgical errors, and provide evidence for training on simulators before ever operating upon a patient.					
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INTRODUCTION:

Technical abilities are highly individualistic, as shown by the wide range of abilities in musicians, athletes, artists, and many others. Given that the issue of creating a competent and safe surgeon is of paramount importance, we hypothesize that the objective measurement of a resident's progress is critical to both the achievement and the assessment of proficiency.

BODY:

Subject enrollment on this research project has not begun due to the lack of ORP approval. However, the research team has been actively involved in the preparation of the ORP application package. Continuing communication with ORP led to further modifications and amendments to the research protocol and consenting process in order to meet the ORP requirements for human subject recruitment. Pre-approved documents are currently being forwarded to local IRB for clearance.

KEY RESEARCH ACCOMPLISHMENTS:

N/A

REPORTABLE OUTCOMES:

N/A

CONCLUSIONS:

N/A

REFERENCES:

None.

APPENDICES:

None.